

Serial No.: 09/813,780
Examiner: Rachel M. Bennett
Group Art Unit: 1615

STATUS OF CLAIMS

Claims 1-48 are presently pending.

Claims 18-21, 29-32 and 43-45 are withdrawn as belonging to a non-elected species.

Claim 33 is cancelled.

REMARKS

Rejection of the claims under 35 U.S.C. § 103(a)

Claims 1-17, 22-28, 33-42, 46-48 are presently rejected under 35 U.S.C. § 103(a) as unpatentable over Sierra (U.S. Patent No. 6,110,484) and further in view of Ronan et al. (U.S. Patent No. 6,060,534). Applicants respectfully traverse these rejections and their supporting remarks. The present invention as claimed is not rendered obvious by the teachings of Sierra.

Sierra discloses a biomedical implant material made of a matrix material having particles of biodegradable porosifying agents within the matrix and the resulting implant material is used as porous scaffolding that supports wound and solid tissue healing. As the porosifying agents dissolve *in situ*, a network of porous connections is created which permits tissue and fluid influx into the matrix. The matrix then acts as a scaffolding for the migrating cells and will degrade as these cells express connective tissue components for remodeling and regeneration (see Sierra col. 3, lines 59-64; col. 6, lines 9-16).

According to Sierra, the biodegradable porosifying agent provides "several advantages over conventional porous implant configurations, including "minimiz[ing] shrinkage of the implant," (col. 6, line 25), "act[ing] as a mechanical stabilizer," (col. 6, line 27), and "alter[ing]... the viscosity of the applied material and improving its mechanical stability in situ." (col. 6, lines 43-51). What is not an advantage that is disclosed or even hinted by Sierra is any manner of controlling, changing, or affecting of the resorption rate of the matrix by the porosifying agent.

Rather, the resorption rate of the matrix and the resulting implant material is described by Sierra to be a function of material choice and the conditions of the biological site ("The rate of degradation of the implant materials will vary depending upon the material used (PEG the

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fastest, crosslinked gelatin the slowest) as well as the relative vascularity of the application site (liver, the fastest, subcutaneous, the slowest)" (see col. 6, lines 56-60)).

In contrast, the present invention provides resorbable particles that "cause said bioresorbable bulk material to resorb upon contact with a body fluid at a controllable resorption rate" (see claims 1-17, 22-28, 33-42, 46-48). Sierra fails to teach or to even suggest this relationship between the resorbable particles and the bulk material that is achieved by the present invention. The Examiner has not shown otherwise.

This infirmity of Sierra is not remedied by the teachings of the secondary reference, Ronan. Ronan teaches improving the mechanical properties of a cross-linked polymeric hydrogel by selective removal of the crosslinking ions to produce a softer, more flexible, and structurally sound implant. Ronan does not disclose or even suggest utilizing resorbable particles to control the resorption rate of the implant material, whether cross-linked or otherwise.

Thus, either singly or in combination, Sierra and Ronan fail to render the present invention as claimed obvious.

For at least the above reasons, reconsideration and withdrawal of the rejection of claims 1-17, 22-28, 33-42, 46-48 as obvious under 35 U.S.C. § 103(a) is respectfully requested.

Double Patenting Objection under 37 C.F.R. §1.75

In the Office Action, the Examiner stated that should claim 1 be found allowable, claim 33 will be objected to as being a substantial duplicate thereof.

In response, Applicant has cancelled claim 33 with this amendment.

CONCLUSION

Applicants respectfully submit that all pending claims are in condition for allowance, early notification of which is earnestly solicited. Should the Examiner be of the view that an interview would expedite the application at large, request is made that the Examiner telephone the undersigned attorney at (908) 518-7700, ext. 7 in order to resolve any outstanding issues.

FEES

The Office is authorized to charge any fees required to deposit account number 50-1047.